Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer implemented method for updating the value of a time-out period (RTO) in a data unit sender that is arranged to send data units to a given data unit receiver, said given data unit receiver implementing a feedback mechanism according to which said given data unit receiver sends feedback messages to said data unit sender, said feedback messages containing information on the receipt of data units sent by said data unit sender, said data unit sender implementing a retransmission mechanism according to which said data unit sender retransmits data units in dependence on said feedback messages, said retransmission mechanism comprising a time-out feature according to which said data unit sender retransmits a given data unit if said data unit sender does not receive within said time-out period a feedback message indicating the correct receipt of said given data unit, and said data unit sender furthermore implementing a response time determining mechanism for repeatedly determining a response time (RTT) indicative of the time that passes between the sending of a data unit to said given data unit receiver and the receiving of a feedback message relating to said data unit from said given data unit receiver, said method comprising:

a value setting procedure for setting a new value of said time-out period, said procedure taking into account the n most recent values of said response time, n being a positive integer, the value setting procedure comprising:

deriving ~~(S1)~~ an intermediate value ~~(IV)~~ from said n most recent values of said response time in accordance with a predetermined derivation procedure ~~(Der)~~,

augmenting ~~(S2)~~ said intermediate value according to a predetermined augmenting procedure ~~(Aug)~~,

reducing ~~(S3)~~ the current value of said time-out period according to predetermined time-out period reducing procedure ~~(Red)~~,

determining the maximum from among at least said augmented intermediate value and said reduced current value of said time-out period, and

setting a new value of said time-out period to said maximum value.

2. (Previously Presented) The method according to claim 1, wherein n equals two.

3. (Previously Presented) The method according to claim 1, wherein said derivation procedure comprises averaging said n most recent values of said response time and setting the averaging result as said intermediate value.

4. (Previously Presented) The method according to claim 1, wherein said derivation procedure comprises selecting one of said n most recent values of said response time and setting said selected value as said intermediate value.

5. (Previously Presented) The method according to claim 4, wherein said selecting of one of said n most recent values of said response time comprises selecting the maximum value.

6. (Previously Presented) The method according to claim 1, wherein said time-out period reducing procedure comprises reducing to a predetermined decay fraction, said decay fraction lying in the range between 0 and 1.

7. (Previously Presented) The method according to claim 6, wherein said decay fraction depends on the number of response time measurements made per response time interval in the communication with said given data unit receiver.

8. (Previously Presented) The method according to claim 6, further comprising a decay fraction updating procedure for updating said decay fraction in

dependence on the number of spuriously retransmitted data units in the communication with said given data unit receiver.

9. (Previously Presented) The method according to claim 8, wherein said decay fraction updating procedure comprises monitoring the ratio of the number of spuriously retransmitted data units to the total number of sent data units within a predetermined time span in the communication with said given data unit receiver.

10. (Previously Presented) The method according to claim 9, wherein said decay fraction updating procedure further comprises:

comparing said ratio with a low threshold and making said decay fraction smaller if said ratio lies below said low threshold, and

comparing said ratio with a high threshold that is larger than said low threshold, and making said decay fraction larger if said ratio exceeds said high threshold.

11. (Previously Presented) The method according to claim 6, wherein said time-out period reducing procedure comprises multiplying by a factor (FRAC) having a value in the range between 0 and 1.

12. (Previously Presented) The method according to claim 11, wherein said factor (FRAC) is determined as

$$1 - 1/(x*SpRT),$$

where x is an adaptive parameter and SpRT is the number of response time measurements made per response time interval in the communication with said given data unit receiver.

13. (Previously Presented) The method according claim 1, wherein said augmenting procedure comprises multiplying said intermediate value with a predetermined augmentation factor (y) having a value larger than one.

14. (Previously Presented) The method according to claim 13, wherein said predetermined augmentation factor (y) is a constant.

15. (Previously Presented) The method according to claim 13, wherein said predetermined augmentation factor (y) is updated repeatedly in accordance with an augmentation factor updating procedure that takes the k most recent values of said response time into account, k being a positive integer.

16. (Previously Presented) The method according to claim 15, wherein said augmentation factor updating procedure comprises:

deriving a new value of a variation indication parameter (N_AMP) that is indicative of a variation among said k most recent values of said response time,

reducing the current value of an augmentation variable (Booster) according to a predetermined augmentation variable reducing procedure,

determining the maximum from among said new value of said variation indication parameter and said reduced augmentation variable (Booster), and

setting a new value of said augmentation variable (Booster) as said maximum,

setting a new value of said augmentation factor (y) on the basis of said new augmentation variable.

17. (Previously Presented) The method according to claim 16, wherein said augmentation variable reducing procedure is the same as said time-out period reducing procedure.

18. (Previously Presented) The method according to claim 16, wherein said variation indication parameter (N_AMP) is the relative difference between the two most recent values of said response time.

19. (Previously Presented) The method according to claim 18, wherein said new value of said augmentation factor (y) is set as the sum of one and said augmentation variable.

20. (Previously Presented) The method according to claim 18, wherein said data unit sender is arranged to communicate with a plurality of different data unit receivers, and an initial value adapting procedure is provided for adapting an initial value of said relative difference to be used for a new communication, according to which said data unit sender adapts said initial value on the basis of the number of spuriously retransmitted initial data units in communications with said plurality of data unit receivers.

21. (Previously Presented) The method according to claim 20, wherein said data unit sender monitors the ratio of the number of spuriously retransmitted initial data units on all active communications within a predetermined time period to the number of all active communications within said predetermined time period.

22. (Previously Presented) The method according to claim 21, wherein said initial value adapting procedure comprises:

comparing said ratio with a low threshold and making said initial value smaller if said ratio lies below said low threshold, and

comparing said ratio with a high threshold that is larger than said low threshold, and making said initial value larger if said ratio exceeds said high threshold.

23. (Canceled)

24. (Previously Presented) A data unit sender for sending data units to one or more data unit receivers that implement a feedback mechanism according to which said data unit receivers send feedback messages to said data unit sender, said

feedback messages containing information on the receipt of data units sent by said data unit sender, said data unit sender comprising:

a retransmission element for implementing a retransmission mechanism according to which said data unit sender retransmits data units in dependence on said feedback messages, said retransmission mechanism comprising a time-out feature according to which said data unit sender retransmits a given data unit if said data unit sender does not receive within said time-out period a feedback message indicating the correct receipt of said given data unit,

a response time determination element for implementing a response time determining mechanism for repeatedly determining a response time (RTT) indicative of the time that passes between the sending of a data unit to a given data unit receiver and the receiving of a feedback message relating to said data unit from said given data unit receiver,

a value setting element for setting a new value of said time-out period taking into account the n most recent values of said response time, n being a positive integer, the value setting element comprising:

an element for deriving an intermediate value from said n most recent values of said response time,

an element for augmenting said intermediate value according to a predetermined augmenting procedure,

an element for reducing the current value of said time-out period according to predetermined time-out period reducing procedure,

an element for determining the maximum from among at least said augmented intermediate value and said reduced current value of said time-out period, and

an element for setting a new value of said time- out period to said maximum value.

25. (Previously Presented) The data unit sender according to claim 24, wherein n equals two.

26. (Previously Presented) The data unit sender according to claim 24, wherein said element for deriving an intermediate value comprises an element for averaging said n most recent values of said response time and setting the averaging result as said intermediate value.

27. (Previously Presented) The data unit sender according to claim 24, wherein said element for deriving an intermediate value comprises an element for selecting one of said n most recent values of said response time and setting said selected value as said intermediate value.

28. (Previously Presented) The data unit sender according to claim 27, wherein said element for selecting one of said n most recent values of said response time is arranged to select the largest value.

29. (Previously Presented) The data unit sender according to claim 24, wherein said element for conducting said time-out period reducing procedure comprises an element for reducing to a predetermined decay fraction, said decay fraction lying in the range between 0 and 1.

30. (Previously Presented) The data unit sender according to claim 29, wherein said element for conducting said time-out period reducing procedure is arranged to make said decay fraction dependent on the number of response time measurements made per response time interval in the communication with said given data unit receiver.

31. (Previously Presented) The data unit sender according to claim 29, further comprising an element for conducting a decay fraction updating procedure for updating said decay fraction in dependence on the number of spuriously retransmitted data units in the communication with said given data unit receiver.

32. (Previously Presented) The data unit sender according to claim 31, wherein said element for conducting said decay fraction updating procedure comprises a monitor for monitoring the ratio of the number of spuriously retransmitted data units to the total number of sent data units within a predetermined time span in the communication with said given data unit receiver.

33. (Previously Presented) The data unit sender according to claim 32, wherein said element for conducting decay fraction updating procedure further comprises

an element for comparing said ratio with a low threshold and making said decay fraction smaller if said ratio lies below said low threshold, and

an element for comparing said ratio with a high threshold that is larger than said low threshold, and making said decay fraction larger if said ratio exceeds said high threshold.

34. (Previously Presented) The data unit sender according to claim 29, wherein said element for conducting said time-out period reducing procedure further comprises an element for multiplying by a factor having a value in the range between 0 and 1.

35. (Previously Presented) The data unit sender according to claim 34, comprising an element for determining said factor is as

$$1-1/(x*SpRT),$$

where x is an adaptive parameter and SpRT is the number of response time measurements made per response time interval in the communication with said given data unit receiver.

36. (Previously Presented) The data unit sender according to claim 24, wherein said element for conducting said augmenting procedure comprises an element

for multiplying said intermediate value with a predetermined augmentation factor having a value larger than one.

37. (Previously Presented) The data unit sender according to claim 36, wherein said predetermined augmentation factor is a constant.

38. (Previously Presented) The data unit sender according to claim 36, comprising an element for updating said predetermined augmentation factor in accordance with an augmentation factor updating procedure that takes the k most recent values of said response time into account, k being a positive integer.

39. (Previously Presented) The data unit sender according to claim 38, wherein said element for conducting said augmentation factor updating procedure comprises:

an element for deriving a new value of a variation indication parameter that is indicative of a variation among said k most recent values of said response time,

an element for reducing the current value of an augmentation variable (Booster) according to a predetermined augmentation variable reducing procedure,

an element for determining the maximum from among said new value of said variation indication parameter and said reduced augmentation variable (Booster), and

an element for setting a new value of said augmentation variable (Booster) as said maximum, and

an element for setting a new value of said augmentation factor (y) on the basis of said new augmentation variable.

40. (Previously Presented) The data unit sender according to claim 39, wherein said element for conducting said augmentation variable reducing procedure is arranged to perform said augmentation variable reducing procedure in the same way as said element for conducting said time-out period reducing procedure is arranged to conduct said time-out period reducing procedure.

41. (Previously Presented) The data unit sender according to claim 39, wherein said variation indication parameter is the relative difference between the two most recent values of said response time.

42. (Previously Presented) The data unit sender according to claim 41, comprising an element for setting said new value of said augmentation factor as the sum of one and said augmentation variable.

43. (Previously Presented) The data unit sender according to claim 41, arranged to communicate with a plurality of different data unit receivers, and comprising an element for conducting an initial value adapting procedure for adapting an initial value of said relative difference to be used for a new communication, according to which said data unit sender adapts said initial value on the basis of the number of spuriously retransmitted initial data units in communications with said plurality of data unit receivers.

44. (Previously Presented) The data unit sender according to claim 43, comprising a monitor for monitoring the ratio of the number of spuriously retransmitted initial data units on all active communications within a predetermined time period to the number of all active communications within said predetermined time period.

45. (Previously Presented) The data unit sender according to claim 44, wherein said element for conducting said initial value adapting procedure comprises:

an element for comparing said ratio with a low threshold and making said initial value smaller if said ratio lies below said low threshold, and

an element for comparing said ratio with a high threshold that is larger than said low threshold, and making said initial value larger if said ratio exceeds said high threshold.